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Paper: Information Disclosure Statement (w/first class stamp, in dupl.); USPTO Form 1449 (12 Sheets); 106 References Cited / 104 Copies Submitted; Check in the amount of $240.00; Postcard

Applicant(s): Phillip Dan Cook
Title: NUCLEOBASE HETEROCYCLIC COMBINATORIALIZATION
Serial No.: 08/884,873
Filed: June 30, 1997

Docket No.: ISIS-2202 (PKL/jjkeeler)

Date Sent: July 31, 1998

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CAU 1611 5-14-98 #5

DOCKET NO.: ISIS-2202 **PATENT**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

Phillip Dan Cook

Serial No.: 08/884,873 **Group Art Unit: 1611**

Filing Date: June 30, 1997 **Examiner: Not Yet Assigned**

For: NUCLEOBASE HETEROCYCLIC COMBINATORIALIZATION

Date of deposit: July 31, 1998
I Hereby certify that this paper is being deposited with the United States Postal Service as First Class Mail, postage prepaid on the date indicated above and is addressed to the Assistant Commissioner for Patents, Washington, DC 20231.

Paul K Legaard
Typed Name: **Paul K. Legaard**
Registration No.: **38,534**

Assistant Commissioner for Patents
Washington DC 20231

Dear Sir:

INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 C.F.R. §1.56 and in accordance with 37 C.F.R. §§1.97-1.98, information relating to the above-identified application is hereby disclosed. Inclusion of information in this statement is not to be construed as an admission that this information is material as that term is defined in 37 C.F.R. §1.56(b).

☐ In accordance with §1.97(b), since this Information Disclosure Statement is being filed either within three months of the filing date of the above-identified application, within three months of the date of entry into the national stage of the above identified application as set forth in §1.491, or before the mailing date of a first Office Action on the merits of the above-identified application, no additional fee is required.

☐ In accordance with §1.129(a), this Information Disclosure Statement is being filed in connection with ☐the first or ☐second After Final Submission, therefore:

☐ Certification in Accordance with §1.97(e) is attached; or

☐ The fee of **$240.00** as set forth in §1.17(p) is attached.

☒ In accordance with §1.97(c), this Information Disclosure Statement is being filed after the period set forth in §1.97(b) above but before the mailing date of either a Final Action under §1.113 or a Notice of Allowance under §1.311, therefore:

☐ Certification in Accordance with §1.97(e) is attached; or

☒ The fee of **$240.00** as set forth in §1.17(p) is attached.

☐ In accordance with §1.97(d), this Information Disclosure Statement is being filed after the mailing date of either a Final Action under §1.113 or a Notice of Allowance under §1.311 but before the payment of the Issue Fee, therefore included are: Certification in Accordance with §1.97(e); Petition Requesting Consideration of the Information Disclosure Statement; and the fee of **$130.00** as set forth in §1.17(i)(1).

☐ Copies of each of the references listed on the attached Form PTO-1449 are enclosed herewith.

☒ Copies of references listed on the attached Form PTO-1449 are enclosed herewith EXCEPT THAT:

☒ In view of the voluminous nature of references **CI and CN**, and the likelihood that these references are available to the Examiner, copies are not enclosed herewith.

☐ In accordance with §1.98(d), copies of the following references listed on the attached Form PTO-1449 are not enclosed herewith because they were previously cited by or submitted to the U.S. Patent and Trademark Office in patent application(s) for which a claim for priority under 35 U.S.C.§120 have been made in the instant application:

☐ Copies of references **[list as appropriate]** listed on the attached Form PTO-1449 were previously cited by or submitted to the Patent and Trademark Office in prior application Serial No. , filed .

☐ If any of the foregoing publications are not available to the Examiner, Applicant will endeavor to supply copies at the Examiner's request.

Please charge any deficiency or credit any overpayment to Deposit Account No. 23-3050. This form is submitted in duplicate.

The relevance of those listed references which are not in the English language is as follows:

The Bargioni reference **(AI)** discloses processes of nucleophilic substitution of the 8-bromo position of purines by malonates under basic conditions.

The Bretschneider et al. reference **(AQ)** discloses processes of nucleophilic substitution of the 4-chloro position of pyrimidines using sulfonamides.

The Brossmer et al. reference **(AS)** discloses processes of nucleophilic substitution of the 4- and 6-chloro and 5-chloromethyl positions of pyrimidines using ethoxide.

The Dornow et al. reference **(BK)** discloses processes of nucleophilic substitution of the 6 methylthio position of pyrimidines using hydroxylamine.

The Kajihara et al. reference **(BZ)** discloses processes of nucleophilic substitution of the 2-bromo position of pyrimidines using 3-hydroxypyridine.

The Profft et al. reference **(DA)** discloses processes of nucleophilic substitution of the 2- and 6-chloro positions of pyrimidines using propoxide.

The Spiteller et al. reference **(DL)** discloses processes of nucleophilic substitution of the 2- and 6-chloro positions of pyrimidines using ethylthiolate.

English language abstracts have been provided for those references which are not in the English language.

Date: July 31, 1998

Paul K. Legaard

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